ABSTRACT OF THE DISCLOSURE

A layer composite of plastic material forms a retroreflector and includes at least one transparent structure layer, a protective layer and a reflection layer enclosed at the common interface between the structure layer and the protection layer. A relief structure formed by substantially identically shaped three-dimensional structure elements is formed in the reflection layer. At their base surfaces the structure elements are of lateral dimensions in the range of between 1 μ m and 100 μ m. The structure elements have side faces which are covered by the reflection layer and which include an angle of inclination of 45°, with a free surface of the layer composite. The relief structure is additively superimposed with a microstructure in at least one surface element. The microstructure has a preferred direction and influences the quality of the reflection action of the layer composite. The retroreflector is suitable for the production of machine-readable optical markings.